

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

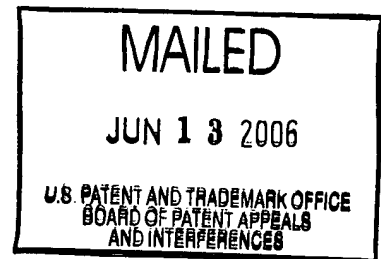
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RONALD S. COK

Appeal No. 2006-1567
Application No. 09/817,547

ON BRIEF



Before JERRY SMITH, BARRY, and BLANKENSHIP, Administrative Patent Judges.

BLANKENSHIP, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-19, which are all the claims in the application.

We reverse, and enter new grounds of rejection in accordance with 37 CFR § 41.50(b).

BACKGROUND

The invention is directed to a controller for active-matrix light emitting displays. The controller uses optical feedback from a display to correct for changes or variability in the display device. Claim 1 is reproduced below.

1. A dynamic controller for a light emitting active-matrix display, the display being responsive to code values for producing a light output, comprising:
 - a) a photosensor located on the display for sensing the light output from the display and generating a feedback signal representative thereof;
 - b) a feedback signal converter for converting the feedback signal to a converted feedback signal having the same form as the code value;
 - c) a code-value corrector including a memory responsive to a code value for producing a corrected code value; and
 - d) an update calculator for creating an updated corrected code value by combining the converted feedback signal with the corrected code value, and storing the updated corrected code value in the memory.

The examiner relies on the following references:

Salam	6,081,073	Jun. 27, 2000 (filed Aug. 29, 1996)
Holloman	6,097,360	Aug. 1, 2000 (filed Mar. 19, 1998)
Shen et al. (Shen)	US 6,414,661 B1	Jul. 2, 2002 (filed Jul. 5, 2000)

Claims 1-18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Salam and Shen.

Claim 19 stands rejected under 35 U.S.C. § 103 as being unpatentable over Salam, Shen, and Holloman.

We refer to the Final Rejection (mailed Jan. 25, 2005) and the Examiner's Answer (mailed Oct. 19, 2005) for a statement of the examiner's position and to the Brief (filed Jul. 28, 2005) and the Reply Brief (filed Dec. 19, 2005) for appellant's position with respect to the claims which stand rejected.

OPINION

Rejections over the prior art

Claim 1 is the sole independent claim before us. According to the statement of the rejection of the claim, set forth in the Answer, Salam teaches a photosensor, a feedback signal, and a code-value corrector as claimed. The "code-value corrector" is deemed to read on microprocessor 3 and memory H, as shown in Figure 2 of Salam. Instant claim 1 further requires an update calculator for creating an updated corrected code value by combining the converted feedback signal with the corrected code value, and storing the updated corrected code value in the memory. Shen is relied upon as teaching an update calculator. The "update-calculator" is deemed to read on elements 16-18, as shown in Figure 2 of Shen.

Salam teaches a microprocessor 3 (Fig. 2) that controls brightness of lamps in an LED display. The microprocessor has an associated memory that stores values to compensate for uneven fading of lamps in the LED display. A "G" value for each lamp

is stored in the memory, such that the lamps have substantially uniform brightness.

Col. 3, l. 31 - col. 4, l. 19.

Shen describes a display system for organic light emitting devices (OLEDs). Figure 2 shows a display system comprising pattern RAM 12 (for digital values), compensation RAM 20 for providing the driving current, and RAM 15, which contains a value for each pixel in the OLED display device 10 that represents the current applied to the pixel at the end of the burn-in interval in order to produce a desired brightness level. The values in the respective RAM's are provided to a digital multiplier 16, a divider 17, and an exponentiation calculator 18. The output of the exponentiation calculator 18 is multiplied with the signal (I_N) provided by the compensation RAM. The resultant signal, stored in compensation RAM 20, represents the change in the current used to compensate for the OLED loss in efficiency over time. Col. 6, l. 3 - col. 7, l. 18.

How the teachings relating to multiplier 16, divider 17, and exponentiation calculator 18 of Shen might suggest an "update calculator" for the G values stored in the memory described by Salam is unclear. Even assuming the references may be combined, we agree with appellant to the extent that the applied prior art fails to show prima facie obviousness of the subject matter of instant claim 1. Because Holloman, applied with Salam and Shen against claim 19, fails to remedy the deficiency in the rejection against base claim 1, we do not sustain the rejection of claims 1-19 under 35 U.S.C. § 103.

New grounds of rejection

We enter the following new grounds of rejection against the claims in accordance with 37 CFR § 41.50(b): Claims 1-19 are rejected under 35 U.S.C. § 112, first and second paragraphs, as being indefinite, lacking written description, and lacking enablement.

Claims 1-19 are rejected under 35 U.S.C. § 112 second paragraph because “the code value” in part (b) of claim 1 lacks proper antecedent basis in the claim. The preamble of claim 1 sets forth the display being responsive to plural “code values.”

For the rejections of the claims under 35 U.S.C. § 112, first paragraph, we note, initially, that instant claim 1 is identical to original claim 1 except for an amendment (filed Jun. 14, 2003) that modified part (d) of the claim. Original part (d) recited:

d) an update calculator responsive to the converted feedback signal, the code value and the corrected code value to update the memory to minimize the difference between the converted feedback signal and the code value.

These “code values,” according to page 4 of the specification, are typically a digital value from zero to 256 and represent the amount of light to be emitted by the light emitting element at the associated address.

Appellant’s written description teaches:

Once the converted feedback signal 44 [Fig. 1] is generated, it is used to update the code-value corrector 18. *The difference between the converted feedback signal 44 and the desired code value data signals 12 is calculated. This difference is then combined with the corrected code value 26 to create a new, updated corrected code value 49.* This updated

corrected code value 49 is stored in the code-value corrector 18 and used to correct subsequent code values.

(Spec. at ¶ bridging pages 4 and 5 (emphasis added).)

The specification thus teaches producing an updated code value by combining the difference between the converted feedback signal and the desired code value data signals with the corrected code value.¹ The teaching may be described, more generally, as set forth at page 3 of the specification, as combining the code value data signals, the converted feedback signal, and the corrected code value data signals to create an updated corrected code value. As shown in Figures 1 and 2, update calculator 48 combines the three inputs to yield the updated corrected code value 49. However, appellant's disclosure does not adequately describe or enable, as required by 35 U.S.C. § 112, first paragraph, a controller that includes an update calculator for creating an updated corrected code value by combining the converted feedback signal with the corrected code value.

CONCLUSION

The rejection of claims 1-19 under 35 U.S.C. § 103 is reversed.

New rejections of claims 1-19 under 35 U.S.C. § 112, first and second paragraphs, are set forth herein.

¹ We observe that "the code value" in part (d) of original claim 1 lacked proper antecedent basis in the claim. The recitation apparently referred to a "desired code value" as taught in the written description.

This decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (2005). 37 CFR § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 CFR § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .


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No time period for taking any subsequent action in connection with this appeal
may be extended under 37 CFR § 1.136(a). See 37 CFR § 1.136(a)(1)(iv).

REVERSED -- 37 CFR § 41.50(b)



JERRY SMITH
Administrative Patent Judge



LANCE LEONARD BARRY
Administrative Patent Judge



HOWARD B. BLANKENSHIP
Administrative Patent Judge

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